

Amendments to The Claims:

Please cancel Claims 10-27. This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Previously presented): A computer system method for autonomic computing using a relational grammar, the method comprising the steps of:

reading an autonomic relational grammar from memory, the autonomic relational grammar comprising a plurality of program statements, the program statements comprising one or more lexical token statements, one or more category statements one or more relationship statements and one or more autonomic action statements, wherein a rule comprises the one or more relationship statements and the one or more autonomic action statements;

sensing a change in an input value related to a first token identified by a first lexical token statement of the one or more lexical token statements;

parsing the input value with the relational grammar to form an autonomic derivation tree, the autonomic derivation tree comprising the first token, a first category, a first relationship and an autonomic action;

using the derived autonomic derivation tree to identify the autonomic action to be performed; and

performing the identified autonomic action, the autonomic action comprising any one of:

configuring the computer system;

optimizing functionality of the computer system;

recovering the computer system from a malfunction; or

protecting an environment of the computer system.

2. (Previously presented): The method according to claim 1, further comprising any one of:

changing the input value related to the first token if an attribute is instantiated at initialization time; or

changing the input value related to the first token if there is a change in a value of the first token.

3. (Previously presented): The method according to claim 1 wherein the rule further comprises a second category statement and wherein the derivation tree further comprises a second category.

4. (Previously presented): The method according to claim 1 wherein the rule further comprises a second lexical token statement and wherein the derivation tree further comprises a second token.

5. (Previously presented): The method according to claim 1 wherein the relationship statements further comprise any one of a system attribute or the relationship between any one of the first category or the first token and any one of a third category or a third token.

6. (Previously presented): The method according to claim 1 wherein the relational grammar further comprises a plurality of rule statements for defining a second rule.

7. Cancel

8. (Previously presented): The method according to claim 1 comprising the further steps of:

determining resource objects and constraints;
solving the constraints to form a constraint solution for the resource objects; and
using the constraint solution to identify the autonomic action to be performed.

9- 27 Canceled

